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CS4460 – Intro to Info Visualization
P5: Putting it all together

Project Overview – College Visualization

Dataset Chosen: colleges.csv
Analytic tasks: Retrieve values, filter, correlate attributes, characterize data, and determine range
Design Overview:

After looking through all the other datasets, we decided to use the college dataset because it seemed a fitting choice for us graduating seniors. Our idea was to create a visualization to assist high school seniors in comparing colleges they might want to apply/attend.

As such, we started with wanting some way to compare an individual college against the entirety of the dataset to show a single college's overall standing. Since there was no obvious way to rank colleges, we came up with the idea of creating a plotted graph using admission rate and retention rate. With this, students could analyze and gain an initial idea of how hard attending the associated school would be relative to the others. Thus, even if the user had never heard of the college before, they would be able to make some judgements on academic difficulty. Each single dot represents a college and selecting the college's name from the drop down box will highlight the corresponding circle.

Using this drop down box for selection, we wanted details on demand that a high school senior might be interested in such as: admission rate, undergrad population, average cost of attendance, ACT median, and SAT average. This would allow for easily switching views, finding relevant information and searching up specific colleges, if desired. Additionally, since these details are significantly important but have no relative relationship with one another, keeping their data as static text would be the most appropriate.

However, having a lot of info represented as text would be highly ineffective. As such, we decided to create two additional visualizations to show even more relevant data. First, we created a pie graph displaying the percentile of each ethnicity on a college. Since each ethnicity was a percentage adding up to 100 we thought creating a pie graph would be the most effective way of representing the information. Additionally, we created a bar graph displaying median debt, median debt on graduation and median debt on withdrawal. Since these three are of the same datatype, comparing them side by side would be beneficial.

By select different colleges to view comparable data, users can then interact with the different graphs and get a better understanding for the various aspects of college admission.